Does this program have any DAWIA equivalencies or other certificates designed into it?

Yes, the MSSE program has all **Systems Planning, Research, Development and Engineering (SPRDE)** career field level III training requirements designed into it's core requirements.
- ✓ ACQ101, ACQ201 & PMT250
- ✓ SYS201 & SYS301

The MSSE degree also has two NPS **Systems Engineering certificates of accomplishment** designed in the program issued at the end of quarters three and six respectively:
- ✓ Military Fundamental of SE
- ✓ Military SE Integration

Contact the MSSE program office for more information?

Wally Owen, DPA
Naval Postgraduate School
MSSE Academic Associate
Meyer Institute of Systems Engineering
Monterey, CA 93943
(831) 656-2048 in Monterey
(636) 925-2982 in St. Louis
wowen@nps.navy.mil

Benjamin Roberts, Ph.D.
Naval Postgraduate School
Director, Distributed Learning Programs
Meyer Institute of Systems Engineering
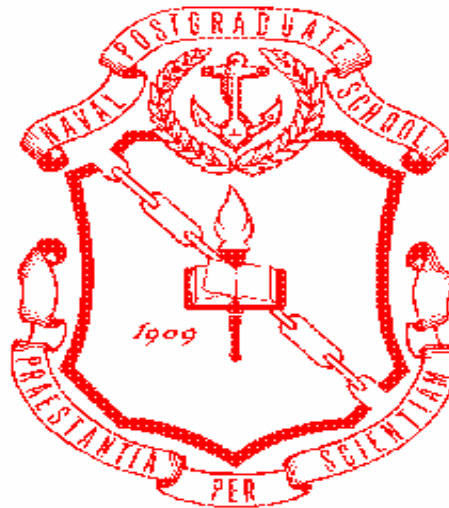Monterey, CA 93943
(831) 656-2792

Where can I get more information?
You can get more information by contacting our program office or visiting our website at:

Http://ocl.nps.navy.mil/msse

"Come join our learning community"

MSSE
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Systems Engineering
Distance Learning Degree Program

Curriculum Brochure

Naval Postgraduate School
Monterey, California

A Master of Science in Systems Engineering tailored to meet your organizations' specific needs

Version   11/05/2002

Some Frequently Asked Questions:

When does the program start?

Program can start at the beginning of any NPS quarter depending on the organization's scheduling desires and will continue for 2 years. Students take two 3-hour courses a quarter for 8 consecutive quarters. Courses are delivered in a **blended learning combination** of onsite and distance-learning methods that includes video tele-education (VTE) and web-enhanced online courses.

Who is the primary audience?

Government civilians and uniformed officers with a technical background who are involved in the design, development and engineering of systems.

Do I write a thesis?

No, but you must contribute significantly to capstone design project and report.

What technical requirements are needed to receive this program?

For VTE: You must have a standards-based (H.320-compatible systems) connection with a dialup capability.

For ONLINE: Internet access.

What is the goal of our Systems Engineering Program?

Systems Engineering applies the engineering thought process to the design and development of large, complex systems. Systems engineers analyze the **need** for a system, determine its **operational concept**, develop functional requirements, produce the system **architecture**, allocate the requirements among sub-systems, **manage the design** of the sub-systems, assure that the final design is integrated, **assess any trade-offs** made, and then implement and test the solution.

The operating forces relies on the **acquisition system** to help identify and solve **systems engineering and integration** problems. If your organization has a strategic vision to be a **world-class** systems engineering and integration organization, the MSSE program is well suited for you.

The MSSE program will help your organization meet your customer's expectations by providing your employees with greater systems engineering and integration knowledge and expertise.

What academic focus does the MSSE program provide?

The MSSE Program is designed to meet your specific educational requirements for a graduate degree in Systems Engineering. The program can have a **technical focus** in any specific area. The program is designed to give an organization six open course slots above SE core requirements to provide a specific technical focus that meets your educational and professional needs.

What is the basic curriculum?

The MSSE Program consists of a **minimum of 48 academic quarter credits** of coursework taught in two-three hour courses a quarter, for a total of 16 courses. All coursework will be offered through NPS. Individuals obtaining the MSSE degree must also satisfactorily complete a **Capstone Design Project** under academic supervision.

The curriculum lineup below is a typical program of instruction for an MSSE Degree with DAWIA SPRDE level III and NPS core course requirements.

QUARTER 1
MN3221 - Principles of Acquisition & Program Mgt - 1
SI4007 - Fundamentals of Systems Engineering

QUARTER 2
MN3222 - Principles of Acquisition & Program Mgmt - 2
SI4008 - Systems Engineering & Integration

QUARTER 3
SI4009 - Systems Architecture for Systems Engineering
Focused Course - Determined by your specific needs
Military Systems Eng Fundamentals Certificate

QUARTER 4
SI4100 - Systems Analysis
Focused Course - Determined by your specific needs

QUARTER 5
SI3011 (3-0) - Eng Economics & Cost Estimation
Focused Course - Determined by your specific needs

QUARTER 6
SI0810 - Capstone Design Project - Requirements Generation
Focused Course - Determined by your specific needs
Military Systems Eng Integration Certificate

QUARTER 7
SI0810 - Capstone Design Project - Synthesis of Alternatives
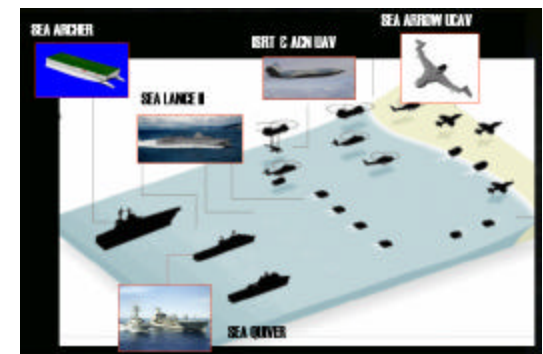Focused Course - Determined by your specific needs

QUARTER 8
SI0810 - Capstone Design Project - Concept Definition
Focused Course - Determined by your specific needs
MSSE degree awarded at program completion

What are entrance requirements for the program

Potential students should have an undergraduate degree in **engineering** or other **related technical field** with a basic math and statistics background with a **2.5 GPA** or greater. The MSSE program office will serve as the **single point-of-contact** for NPS application and admissions requirements and will provide an application that can be used internally by the organization and meets NPS admission requirements.

What is an example of a capstone design project?

Last year, NPS SE students developed the concept and designed a force for **combat in the littorals**. This force included UAV combat aircraft; UAV ISRT aircraft; small fast fighting ships; a new, very fast automated carrier built from the keel up to support UAVs; the command and control network; the logistical support system and ships; and several new weapon systems such as a Free Electron Laser for point defense. NPS will conduct a needs assessment with your organization's leadership prior to designing the student capstone project.